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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/878,401	06/12/2001	Jae Yong Park	2658-0268P	2192

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EXAMINER

NGUYEN, JENNIFER T

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 11/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/878,401

Applicant(s)

PARK, JAE YONG

Examiner

Jennifer T Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office action is responsive to Amendment filed on 08/25/2003.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over prior art Fig. 5, cited by Applicant, in view of Nitta (U.S. Patent No. 6,275,220).

Regarding claim 1, the prior art Fig. 5 teaches an electro-luminescence display comprising: an electro-luminescence panel (30) having a display area and a non-display area; driving circuit boards for applying driving signals to a gate line (6) and a data line (7) provided on a surface of the electro-luminescence panel (30) (in specification from page 4, line 23 to page 5, line 6).

The prior art Fig. 5 differs from claim 1 in that it does not specifically teach the tape carrier packages connecting the driving circuit boards and the electro-luminescence panel in a planar state wherein the tape carrier packages and the driving circuit boards are disposed upon a surface of said panel. However, referring to Figs. 1 and 5, Nitta teaches the tape carrier packages (21) connecting the driving circuit boards (22) and the electro-luminescence panel in a planar state wherein the tape carrier packages (21) and the driving circuit boards (22) are disposed upon a surface of said panel (col. 2, lines 24-53 and from col. 3, line 40 to col. 4, line 12). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to

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incorporate the tape carrier packages connecting the driving circuit boards and the electro-luminescence panel in a planar state wherein the tape carrier packages and the driving circuit boards are disposed upon a surface of said panel as taught by Nitta in the system of prior art Fig. 5 in order to provide a display that is capable of being made having a small thickness.

Regarding claim 2, the prior art Fig. 5 further teaches the driving circuit boards include: a gate driving circuit (6) for applying driving signals to the gate lines; and a data driving circuit (7) for applying driving signals to the data lines (in specification from page 4, line 23 to page 5, line 6).

Regarding claims 3-5, the prior art Fig. 5 further teaches the driving circuit boards include a plurality of output pads electrically connected to the tape carrier packages (14) and panel (30) includes a plurality of input pads (26) that are provided at the nondisplay area and electrically connected to the tape carrier packages (14) (in specification from page 4, line 23 to page 5, line 6).

Regarding claim 6, the prior art Fig. 5 further teaches the tape carrier packages include: a first group of tape carrier packages (14) arranged between the panel (30) and the gate driving circuit (6) and a second group of tape carrier packages (14) arranged between the panel (30) and the data driving circuit (7) (in specification from page 4, line 23 to page 5, line 6).

Regarding claim 7, the prior art Fig. 5 further teaches the tape carrier packages (14) has a first side for connecting the driving circuit boards (7) to the panel (30) and a second side for holding a computer chip (IC 14) (in specification from page 4, line 23 to page 5, line 6).

Regarding claims 8-10, the combination of the prior art Fig. 5 and Nitta teaches a substantial portion of each of said tape carrier packages (21) having a first portion disposed in a

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common plane with said driving circuit boards (22) and connected to the panel and a second portion disposed in a contiguous plane to the common plane of said panel and said first portion (col. 2, lines 24-53 and from col. 3, line 40 to col. 4, line 12).

4. The prior made of record and not relied upon is considered to pertinent the applicant's disclosure:

Aoki (U.S. Patent No. 5,966,115) teaches drive unit and electronic equipment.

Nishikawa et al. (U.S. Patent No. 5,907,375) teaches input-output unit.

Nitta (U.S. Patent No. 6,597,113) teaches flat panel display.

Kim et al. (Pub. No. US 2003/0103027) teaches tape carrier package

Kim et al. (Pub. No. US 2003/0201989) teaches signal transmission system.

Takabayashi et al. (Pub. No. US 2002/0067331) teaches liquid crystal display.

5. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jennifer T. Nguyen** whose telephone number is **703-305-3225**.

The examiner can normally be reached on Mon-Fri from 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reach at **703-305-4709**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC. 20231


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Or faxed to: 703-872-9306 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA, sixth-floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the Technology Center 2600 Customer Service Office whose telephone
number is 703-306-0377.

Jennifer T. Nguyen
11/16/03



**RICHARD HUERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600**